

On a new species of the genus *adelobothrium*, shipley (1900) from the intestine of marine fish *carcharias acutus*

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Abstract

The genus *Adelobothrium*₁ was established by Shipley, in 1900 [1], as *Aetiobatidis* from *Aediobatis narinari* from Loyalty, Island. Later on no species is added to this genus. Ten mature specimens of the cestode parasites were collected from the spiral valve *Carcharias acutus*. The present species differ from all other known species of the genus, scolex large, blunt, round anteriorly, posterior region membranous, oval in shape, provided with four accessory suckers, neck present, mature segments craspedote, longer broad, testes, rounded, cirrus pouch large, oval sub – marginal, extend beyond the middle of the segments, ovary bilobed, irregular margin, numerous acini vitellaria follicular.

Keywords: Marine fish, Cestode, *Adelobothrium*.

INTRODUCTION

The genus *Adelobothrium* was established by Shipley, in 1900 [1] as *A. aetiobatidis* from *A. aetiobatidis narinari* from Loyalty, Island. The present paper deals with description of new species *Adelobothrium carchariasae* n. sp.

MATERIALS AND METHODS

The Present species was collected from the spiral valve of the *Carcharias acutus*, Kakinada, A.P. (East coast of India), in the month of April 1988. From the spiral valve of *Carcharias acutus*. they are preserved in 4% formalin, stained with Harris hematoxylin, dehydrated, cleared in xylene, mounted on D.P.X. drawings are made with the aid of Camera Lucida, Identification was carried out with the help of systema Helminthes.

DESCRIPTION

Ten mature specimens of the cestode parasites, collected from the spiral valve of the *Carcharias acutus*. Scolex medium, anterior blunt, round portion posterior one membranous, collar like, anterior region of the scolex is having longitudinal muscle fibers, straight in the middle, divergent on the both the lateral sides measures 1.295 in length, 0.0446 – 12.022 in width. Posterior region oval, four accessory suckers, measures 0.257 – 0.537 in length, 0.75 in width, accessory suckers, small, oval, measure 0.090 in length, 0.068 in width. Neck short, wide, measures 0.409 in length, 0.007 width. Mature segments craspedote, longer than broad, almost two times longer than broad, measure 0.916 in length, 0.462 in width. Testes small, round, 90 – 95, pre ovarian, distributed

on the cirrus pouch, single field, unevenly distributed measure 0.030 – 0.037 in dia., cirrus pouch large, oval, extends beyond the middle of the segments, situated just anterior to the middle of the segments, opens sub marginally, measures 0.310 in length, 0.007 – 0.310 in width, cirrus thin tube, straight, contained within the cirrus pouch, measures 0.287 in length 0.007 in width., deferens thin, straight, short, measures 0.045 in length, 0.007 in width. Ovary bilobed, irregular margins, numerous acini, lobes equal, extends transversely up to both the segments measures 0.386 in length 0.075 – 0.113 in width. Vagina wide tube, posteroventral to the cirrus opens into the ootype, measures 0.446 in length 0.015 – 0.030 in width, genital pores small, regularly alternate, oval, open sub marginally in the cuticular longer than broad, craspedote, segments nearly twice in length than the width measure 1.068 in length, 0.530 in width, uterus saccular, filled with numerous eggs, measures .984 in length, 0.430 – 0.462 in width, vitellaria follicular, in two rows, on each side, from anterior to the posterior margin of the segments.

RESULTS AND DISCUSSION

The genus *Adelobothrium*, established by Shipley, in 1900 [1] an *Aetiobatidis* from *Aediobatis narinari* from Loyalty, Island. Ashok Mote *Adelobothrium* Kakinadensis n.sp. Later on no species is added to this genus.

- 1) The worm under discussion in having the scolex large, blunt, round anteriorly, posterior region membranous, oval, provided four accessory suckers neck present, short mature segments craspedote, longer than broad, almost ½ times longer than broad, testes round, 90-95, cirrus pouch large, oval, sub marginal, extend beyond the middle of the segments, ovary bilobed, irregular margin, numerous acini, vitellaria follicular differs from *A. aetiobatidis* having the scolex 0.01x0.0850, anterior region, conical, covered laterally with spines; posterior region large, membranous, four accessory suckers, neck absent, mature segments broader than long anteriorly but longer than broad, testes oval, numerous, 130-150 in number; cirrus pouch very small, oval, marginal, vagina posteroventral to cirrus pouch, vitellaria follicular, two rows on each side of the segments.

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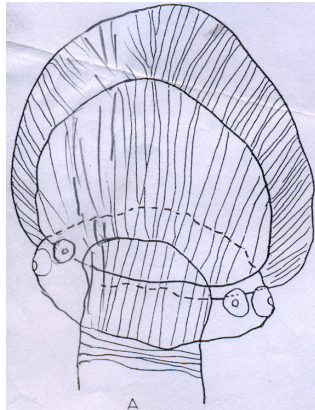
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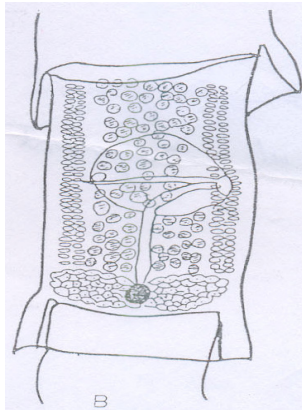
- 2) The present cestode parasites are differing from *adelobothrium kakinadinsis* n.sp. is having distinguishing character are tests 300-310 in number, distributed throughout the segment, on all sides of ovary, few on the ovarian lobes and measure 1.007 in diameter, cirrus pouch is oval in shape, large in size, obliquely placed, and measures 0.280 in length and 0.114-0.219 in width. The cirrus is protrucible and measures 0.303 in length and 0.100-0.023 in width. ovary is bilobed, lobes unequal in size and measures 0.689 in length and 0.113-0.242 in width, poral lobes is larger than aporal lobe and measures 0.341 in length and 0.909-0.144 in width, aporal lobe is small in size and

measures 0.371 in length and 0.106-0.181 in width. Vagina is a thin tube, anterior to the cirrus pouch, and measures 1.129 in length and 0.015-0.030 in width genital pores are irregularly alternate, and measure 0.075 in length and 0.045 in width. Vitellaria granular, wide strips, in the cortical parenchyma, from anterior to the posterior margin of the segments except cirrus pouch.

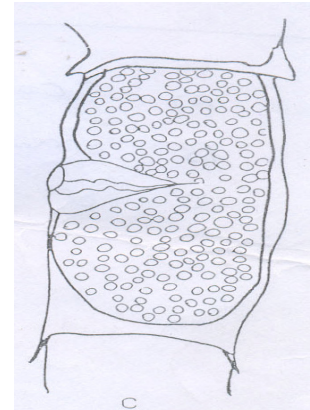
- 3) The above discussed characters are sufficient to erect a new species for these worms, hence the name *Adelobothrium carcharias* n. sp. Proposed after the generic name of the host.



A) SCOLEX



B) MATURE SEGMENT



C) GRAVID SEGMENT

Plate no 1. *Adelobothrium carcharias* n. sp.

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